MEMORANDUM

November 20, 2013

To: Utah Board of Oil Gas and Mining

From: Steve Alder,
Assistant Attorney General

Re: December 4, 2013 Board Hearing Memorandum
In the Matters of:
Newfield Production Co., Docket No. 2013-035, Cause No. 139-112; and
Newfield Production Co., Docket No. 2013-036, Cause No. 139-113.

I. Introduction

This memorandum addresses questions presented by these two requests by Newfield. The issues raised by each matter are similar in one respect although the second matter is more complicated and contested.

A. Newfield Production Co., Docket No. 2013-035, Cause No. 139-112

Newfield is seeking approval under the exception location rule for a point of entry into the productive interval and a point of termination for a horizontal well that is proposed to be closer than the required 660 foot set back established when the lands were spaced. The proposed locations are 330 feet from the drilling unit boundary. Newfield has provided notice to all owners of the adjoining drilling units. The spacing order for these sections allows up to four wells. One well has been drilled and this well is proposed. If the next two wells are proposed to be located at the same distance from the section lines, then it seems that the proper request would be to modify the spacing order to allow drilling to within 330 feet of the section line for the point of entry and the point of termination of the horizontal wells.

The only other question raised by this request is why the surface location does not require an exception location. This issue was addressed in the memorandum filed for the hearing last month. Based on the orders from that hearing, it is assumed the Board is willing to authorize the off-lease surface location subject to the conditions that: (1) the operator obtain authorization for the well location and bore from the surface and mineral owner; (2) the well casing shall be cemented to the point of entry into the productive formation; and (3) the order shall provide that there can be no uphole completion or production without complying with the requirements for an exception location approval.

These conditions or alternative language should be incorporated in to a rule change. At the present time these orders do not require that the "owners" of the lands where the well is to be drilled receive notice of the spacing hearing approving of the well

location, provided the operator certify that it has 'authorization' to drill the well at the location. The effect is to determine that the exception location rule does not apply to such off lease surface locations for horizontal wells. The rule is not clear on this question and should be modified to clearly provide that it does not apply to such wells provided the three conditions above are adopted, that the rule does apply but an exception location can be approved as part of a spacing order when notice has been given, or some other alternative.

B. Newfield Production Co. Docket No 2013-036, Cause No. 139-113

In this Docket Newfield is asking for the Board to establish seven "special conditional" 1280-acre drilling units for horizontal wells to be drilled in the Uteland Butte member of the Lower Green River formations. The request asks the Board to authorize up to seven wells per drilling unit "on a pilot basis" with the producing interval to be no closer than 330 feet from the northern and southern boundaries and no closer than 660 feet from the eastern and western boundaries. In addition, the Request asks that the current 640-acre spacing for vertical wells and "short lateral horizontal wells" remain in place for the Uteland Butte and for the remainder of the lands spaced by those orders with the exception of the Uteland Butte member as spaced in this request.

This spacing matter raises three questions: (1) can the Uteland Butte formation within the spaced lands be subject to two different spacing orders, one for future 1280 acre wells and one for existing or future vertical or short (640-acre) horizontal wells; (2) Should a drilling unit be based on full sections when it is anticipated that the drilling unit will accommodate seven wells, suggesting that the area to be drained by one well will be much less and that a drilling unit might be better identified as a 320 acre unit that is two sections long and ¼ section wide; and (3) Should such a large area (14 sections), and large number of wells (49) should be authorized as a pilot before the reports of similar pilots have been provided?

In addition, as with the Newfield matter just discussed, this request continues to assume the exception location rule does not apply to surface locations for horizontal wells. The comments above apply to this aspect of this request.

(1) Can the Uteland Butte formation within the spaced lands be subject to two different spacing orders, one for future 1280 acre wells and one for existing or future vertical or short (640-acre) horizontal wells?

This proposal appears to provide the operator with the option of deciding if a well will be drilled as a one-section length well or a two-sections long well. If one well for two sections can more efficiently and economically drain the formation then a one-section drilling unit would violate the statutory requirement that a drilling unit be no smaller than the size that can efficiently and economically drained by one well. Utah Code § 40-6-6(3)(2013).

Additionally, the allowance of a vertical well to drain the formation and share on a 640-acre ownership while requiring the horizontal well to share on a 1280 acre ownership provides inherent conflict between the two methods of producing the pool. If the horizontal well is more efficient, then the smaller drilling unit for vertical wells should prohibit production from the Uteland Butte.

Newfield has advised the Division that it does not intend to drill any more horizontal wells on a 640 acre length and did not intend to ask for that option. Newfield has also said that vertical wells will not produce from the Uteland Butte. If these facts are affirmed at the hearing and the order conforms to the amended request the Division's concerns will be satisfied.

(2) Should a drilling unit for a horizontal well be based on full sections when it is anticipated that the drilling unit will accommodate seven wells, suggesting that the area to be drained by one well will be much less and that a drilling unit might be better identified as a 320 acre unit that is two sections long and ¼ section wide?

This question goes to the reasons for establishing a drilling unit. One reason is to avoid waste by avoiding the drilling of too many wells into a formation and resulting in waste of either economic resources or oil and gas by reducing the formations productive potential. A second reason for spacing, although not one stated by statute is to provide some control over development either through spacing alone or in conjunction with pooling. It does appear that spacing units that are much larger than the area one well is expected to drain, opens up the potential for anticompetitive activities that ultimately might reduce production and or preclude an owner from maximizing his development opportunities. For vertical wells, there has been greater resistance to overly large drilling units when an area has not been spaced (as opposed to infill drilling). The reason for this opposition has been in part to comply with the evidence and statutory definition of a drilling unit, and in part due to avoid objections by adjoining owners.

For horizontal wells the sectional (640-acre) drilling location allowed by the general well siting rule has established a practice of spacing horizontal wells for one or multiple sections while evidence for such spacing suggests smaller lateral area is expected to be drained. The Division believes that drilling units composed of slices of sections (for example the north half of the north half of a section) would be difficult to administer, would preclude optimum spacing between horizontal wells and offers no advantages since most horizontal well are developed on a sectional basis.

If the practice of section wide spacing for horizontal wells has advantages and is consistent with the statute defining a drilling unit as the area that can be drained by one well, then perhaps rule-making would be helpful to clarify the basis and limitations if any on this practice.

(3) Should such a large area (14 sections), and large number of wells (49) be authorized as a pilot project?

The use of the term "pilot project" creates uncertainty as to the status of the spacing order and the lands. There is no 'pilot project' category with different requirements for spacing lands within the statutes of rules. Spacing for a pilot project is the same as other spacing. If land is spaced on a 'pilot project basis' the order is fully valid as a basis for sharing production and to force pool owners of the spaced lands as any other spacing order. Although spacing is supposed to be based on data that has been developed from drilling, often 'pilot projects' are proposed for the purpose of developing such data when the existing information is less than might be considered convincing. In such instances the size of the project should be limited to a size sufficient to develop the data that is needed.

Occasionally, the reasons for spacing may not be related to a need to protect correlative rights and avoid waste but for other reasons. In this instance, Newfield alleges the Board's order is needed to satisfy a federal requirement for a communitization agreement. "Pilot projects" have also be used for what is actually more like an exploratory unit or cooperative development plan allowed under Utah Code § 40-6-7 and the federal rules. However, such exploratory units do not create a permanent change in the status of the mineral ownership. If lands in the exploratory unit are not developed within a certain time frame, they are no longer part of the exploratory unit.

What remedies does the Board have once it has spaced an area on a pilot basis if the assumptions underlying the pilot project do not prove to be correct? What are the Board's obligations and options if the pilot project fails? Should such a spacing order require that the Division or some other party bring an action to vacate the order if the pilot project is not successful? Or should the spacing for "pilot project" lands terminate automatically if the project does not proceed or does not succeed by a certain date? Currently the presumption is that the spacing is permanent regardless of whether is a pilot or not. The required reporting does not specify the consequences of such a failure so there is no advance notice to parties that the spacing may not be permanent.

Since other pilot projects have been approved for Newfield allowing this spacing for similar horizontal wells in similar geologic conditions, the Board should consider limiting the size of the pilot project and tie this project to the report on those other pilots projects. If the spacing appears to be appropriate based on other projects then the additional reporting could be limited to the Division or dispensed with entirely for this project, except if the results vary.